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Leonard C. Suchyta  
c/o Christian Andersen  
Verizon Corporate Services Group Inc.  
600 Hidden Ridge, HQE03H01  
Irving, TX 75038

EXAMINER

PYO, MONICA M

ART UNIT PAPER NUMBER

2161

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/685,479 | <b>Applicant(s)</b><br>COLBATH ET AL. |  |
|                              | <b>Examiner</b><br>Monica M. Pyo     | <b>Art Unit</b><br>2161               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/20/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***DETAILED ACTION***

1. This communication is responsive to the Election/Restriction filed on 6/6/2006.  
Applicant elected Group I, claims 1-11 and 16-19 in page 2 of Remark is acknowledged. Group II, claims 12-15 are withdrawn from further consideration by the Examiner, 37 CFR 1.142(b) as being drawn to a non-elected. Therefore, Claims 1-11 and 16-19 are present for examination. Claims 12-15 are pending.
2. Claims 1-11 and 16-19 are rejected.

***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on 1/20/2004 was filed being considered by the examiner.
  - From the IDS submitted, 2 NPL documents were not included. Therefore, 2 missing documents were not considered by the Examiner as indicated in the PTO-1449 forms.

***Preliminary Amendment***

4. The preliminary amendment submitted on 1/23/2003 was filed and acknowledged by the examiner.

***Drawings***

5. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 18, this claim recites the limitation "predetermined portion" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 is also rejected by virtue of its dependency to claim 18.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-3, 9 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Non Patent Literature "Spoken Documents: Creating Searchable Archives from Continuous Audio", published by System Sciences, 2000, January 4-7, 2000, pp. 9, written by Kubala et al. (hereafter Kubala).

Claims 1 and 9:

Regarding Claim 1, Kubala disclose a method of creating labels for clusters of documents, comprising:

- identifying topics associated with the documents in the clusters, as an Identifier name-entity extraction system (Kubala: col. 6, lns. 10-25; col. 8, lns. 11-16);
- determining whether the topics are associated with at least half of the documents in the clusters, as a response is half-correct when the label is correct (Kubala: col. 5, lns. 34-48; col. 8, lns. 11-16);
- adding ones of the topics that are associated with at least half of the documents in the clusters to cluster lists, as to add more topics for the topic classifier (Kubala: col. 8, lns. 11-16; col.14, lns. 29-33; col. 15, lns. 1-10); and
- forming labels for the clusters from the cluster lists, as an identification system to cluster and give a unique name (Kubala: col. 5, lns. 21-32).

Claim 9 is also rejected based upon the same reasoning as Claim 1.

Claim 2:

Regarding Claim 2, Kubala discloses the method wherein the identifying topics includes: using a probabilistic Hidden Markov Model to determine the topics (Kubala: col. 6, lns. 10-25).

Claim 3:

Regarding Claim 3, Kubala discloses the method wherein the forming labels includes: ranking the ones of the topics (Kubala: col. 6, lns. 37-49), and placing the ones of the topics in the labels in ranked order (Kubala: col. 7, lns. 18-26; col. 8, lns. 1-9).

Claim 16:

Regarding Claim 16, Kubula discloses a topic detection system, comprising:  
a decision engine configured to, as a Rough'n'Ready system (Kubula: col. 4, lns. 37-44):  
    receive a plurality of documents, as a large quantity of documents (Kubula: col. 9, lns. 46-51; col. 10, lns. 1-2), and  
    group the documents into a plurality of clusters (Kubula: col. 10, lns. 3-18); and  
a label engine configured to:  
    identify topics associated with the documents in the clusters, as an Identifier name-entity extraction system (Kubala: col. 6, lns. 10-25; col. 8, lns. 11-16);,  
    determine whether the topics are associated with at least half of the documents in the clusters, as a response is half-correct when the label is correct (Kubula: col. 5, lns. 34-48; col. 8, lns. 11-16); and  
    form labels for the clusters using ones of the topics that are associated with at least half of the documents in the clusters, as an identification system to cluster and give a unique name (Kubala: col. 5, lns. 21-32).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 4-8, 10-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubula, in view of U.S. Patent No, 5,963,940 issued to Liddy (hereafter Liddy).

Claims 4 and 10:

Regarding Claim 4, Kubula disclose the method wherein the ranking the ones of the topics includes: ranks to the ones of the topics based on a number of the documents with which the ones of the topics are associated (Kubula: col. 8, lns. 11-16).

Kubula does not explicitly disclose: assigning ranks.

However, Liddy discloses: assigning ranks (Liddy: col. 21, lns. 28-52).

It would have been obvious to a person with ordinary skill in the art at the time of invention to incorporate the Liddy's teaching of assigning ranks in the IdentiFinder system of Kubula. Skilled artisan would have been motivated to combine the Liddy's method of assigning ranks in the Kubula's teaching of utilizing an IdentiFinder system to be able to assign ranks to be able to utilize a ranking list and to better find the similarity (Liddy: col. 2, lns. 58-63).

Claim 10 is also rejected based upon the same reasoning as Claim 4.

Claims 5 and 17:

Regarding Claim 5, Kubula and Liddy disclose the method further comprising:

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ranking the ones of the topics based on a number of the documents with which the ones of the topics are associated (Kubula: col. 6, lns. 42-49) and (Liddy: col. 24, lns. 56-67; col. 25, lns. 1-2).

Claim 17 is also rejected based upon the same reasoning as Claim 5.

Claim 6:

Regarding Claim 6, Kubula and Liddy disclose the method wherein when a first one of the ones of the topics, as a first topic, is associated with a majority of the documents in one of the clusters and a second one of the ones of the topics, as a second topic, is associated with less than the majority of the documents in the one of the clusters, the first topic is ranked higher than the second topic (Kubula: col. 14, lns. 8-26) and (Liddy: col. 21, lns. 59-67).

Claim 7:

Regarding Claim 7, Kubula and Liddy disclose the method wherein the ranking the ones of the topics includes: assigning higher ranks to first ones of the ones of the topics that are associated with larger numbers of the documents than second ones of the ones of the topics that are associated with smaller numbers of the documents (Kubula: col. 6, lns. 42-49) and (Liddy: col. 33, lns. 4-8, 11-26 and 65-67; col. 34, lns. 1-9).

Claim 8:

Regarding Claim 8, Kubula and Liddy disclose the method wherein the forming labels includes:

sorting the cluster lists based on the rankings of the ones of the topics (Liddy: col. 3, lns. 42-48).

Claim 11:



Regarding Claim 11, Kubula and Liddy disclose the system wherein the means for generating a label includes:

means for sorting the one or more of the topics based on the ranking to form the label for the cluster (Liddy: col. 3, lns. 42-48; col. 25, lns. 34-41).

12. Claims 18-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kubala.

Claim 18:

Regarding Claim 18, Kubula discloses a method for creating labels for clusters of documents, comprising:

identifying topics associated with the documents in the clusters, as an Identifier name-entity extraction system (Kubala: col. 6, lns. 10-25; col. 8, lns. 11-16);

determining whether the topics are associated with a predetermined portion of the documents in the clusters, as a response is half-correct when the label is correct (Kubala: col. 5, lns. 34-48; col. 8, lns. 11-16); and

generating labels for the clusters using ones of the topics that are associated with approximately half or more of the documents in the clusters, as to add more topics for the topic classifier (Kubala: col. 8, lns. 11-16; col.14, lns. 29-33; col. 15, lns. 1-10).

It would have been obvious to a person with ordinary skill in the art at the time of invention to consider the Kubula's teaching of 100 speaker populations out of 170 populations (in col. 5, lns. 34-48) as a predetermined portion. Skilled artisan would have been motivated to utilize the Kubula's teaching to exemplify a speaker population number as a "document portion" to enhance the query performance and result with a proficient outcome.

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Claim 19:

Regarding Claim 19, Kubula discloses the method wherein the predetermined portion of the documents is equal to approximately half of the documents (Kubula: col. 5, lns. 34-48; col. 8, lns. 11-16).

*Conclusion*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica M. Pyo whose telephone number is 571-272-8192. The examiner can normally be reached on Mon-Fri 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monica M Pyo  
Examiner  
Art Unit 2161

mp  
7/21/2006

*Leslie Wong*  
*Primary Examiner*